

10537434.trn

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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	MAY 01	New CAS web site launched
NEWS	3	MAY 08	CA/CAPplus Indian patent publication number format defined
NEWS	4	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS	5	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS	6	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS	7	MAY 21	CA/CAPplus enhanced with additional kind codes for German patents
NEWS	8	MAY 22	CA/CAPplus enhanced with IPC reclassification in Japanese patents
NEWS	9	JUN 27	CA/CAPplus enhanced with pre-1967 CAS Registry Numbers
NEWS	10	JUN 29	STN Viewer now available
NEWS	11	JUN 29	STN Express, Version 8.2, now available
NEWS	12	JUL 02	LEMBASE coverage updated
NEWS	13	JUL 02	LMEDLINE coverage updated
NEWS	14	JUL 02	SCISEARCH enhanced with complete author names
NEWS	15	JUL 02	CHEMCATS accession numbers revised
NEWS	16	JUL 02	CA/CAPplus enhanced with utility model patents from China
NEWS	17	JUL 16	Caplus enhanced with French and German abstracts
NEWS	18	JUL 18	CA/CAPplus patent coverage enhanced
NEWS	19	JUL 26	USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS	20	JUL 30	USGENE now available on STN
NEWS	21	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	22	AUG 06	BEILSTEIN updated with new compounds
NEWS	23	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	24	AUG 13	CA/CAPplus enhanced with additional kind codes for granted patents
NEWS	25	AUG 20	CA/CAPplus enhanced with CAS indexing in pre-1907 records
NEWS	26	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	27	AUG 27	USPATOLD now available on STN
NEWS	28	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS EXPRESS	29	JUNE 2007:	CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
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FILE 'HOME' ENTERED AT 15:03:48 ON 04 SEP 2007

=> s tolperisone

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=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.42

0.42

FILE 'HCAPLUS' ENTERED AT 15:04:43 ON 04 SEP 2007

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FILE COVERS 1907 - 4 Sep 2007 VOL 147 ISS 11

FILE LAST UPDATED: 3 Sep 2007 (20070903/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s tolperisone

L1 166 TOLPERISONE

=> s l1 and method for manufacturing

3483639 METHOD

1395983 METHODS

4486030 METHOD

(METHOD OR METHODS)

161290 MANUFACTURING

1 MANUFACTURINGS

161291 MANUFACTURING

(MANUFACTURING OR MANUFACTURINGS)

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210847 MANUFG
300798 MANUFACTURING
(MANUFACTURING OR MANUFG)
61917 METHOD FOR MANUFACTURING
(METHOD (1W) MANUFACTURING)
L2 0 L1 AND METHOD FOR MANUFACTURING

=> s l1 and process
2482971 PROCESS
1690551 PROCESSES
3702740 PROCESS
(PROCESS OR PROCESSES)

L3 3 L1 AND PROCESS

=> s l1 and 4-methylpropiophenone
5662776 4
496 METHYLPROPIOPHENONE
13 METHYLPROPIOPHENONES
504 METHYLPROPIOPHENONE
(METHYLPROPIOPHENONE OR METHYLPROPIOPHENONES)
71 4-METHYLPROPIOPHENONE
(4 (W) METHYLPROPIOPHENONE)

L4 2 L1 AND 4-METHYLPROPIOPHENONE

=> s l1 and 1,2-dioxolane
9270525 1
9277378 2
15717 DIOXOLANE
2226 DIOXOLANES
16240 DIOXOLANE
(DIOXOLANE OR DIOXOLANES)
223 1,2-DIOXOLANE
(1 (W) 2 (W) DIOXOLANE)

L5 1 L1 AND 1,2-DIOXOLANE

=> d l3 ibib abs hitstr tot

L3 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:488404 HCAPLUS

DOCUMENT NUMBER: 145:55772

TITLE: A comparative study of the action of
tolperisone on seven different voltage
dependent sodium channel isoforms

AUTHOR(S): Hofer, Doris; Lohberger, Birgit; Steinecker, Bibiane;
Schmidt, Kurt; Quasthoff, Stefan; Schreibmayer,
Wolfgang

CORPORATE SOURCE: Molecular Physiology Laboratory, Institute of
Biophysics, Center for Physiological Medicine, Medical
University of Graz, Graz, A-8010, Austria

SOURCE: European Journal of Pharmacology (2006), 538(1-3),
5-14

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The specific, acute interaction of tolperisone, an agent used as
a muscle relaxant and for the treatment of chronic pain conditions, with
the Na v1.2, Na v1.3, Na v1.4, Na v1.5, Na v1.6, Na v1.7, and Na v1.8
isoforms of voltage dependent sodium channels was investigated and
compared to that of lidocaine. Voltage dependent sodium channels were

expressed in the *Xenopus laevis* oocyte expression system and sodium currents were recorded with the two electrode voltage clamp technique. Cumulative dose response relations revealed marked differences in IC50 values between the two drugs on identical isoforms, as well as between isoforms. A detailed kinetic anal. uncovered that tolperisone as well as lidocaine exhibited their blocking action not only via state dependent association/dissociation with voltage dependent sodium channels, but

a

considerable fraction of inhibition is tonic, i.e. permanent and basic in nature. Voltage dependent activation was affected to a minor extent only. A shift in steady-state inactivation to more neg. potentials could be observed for most drug/isoform combinations. The contribution of this shift to overall block was, however, small at drug concns. resulting in considerable overall block. Recovery from inactivation was affected notably by both drugs. Lidocaine application led to a pronounced prolongation of the time constant of the fast recovery process for the Na v1.3, Na v1.5, and Na v1.7 isoforms, indicating common structural properties in the local anesthetic receptor site of these three proteins. Interestingly, this characteristic drug action was not observed for tolperisone.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:448915 HCAPLUS

DOCUMENT NUMBER: 122:248487

TITLE: Optimization of the separation of enantiomers of basic drugs. Retention mechanisms and dynamic modification of the chiral bonding properties on an α -acid glycoprotein column

AUTHOR(S): Hermansson, Joergen; Grahn, Anders

CORPORATE SOURCE: ChromTech AB, Box 6056, Hagersten, S-129 06, Swed.

SOURCE: Journal of Chromatography, A (1995), 694(1), 57-69
CODEN: JCRAEY; ISSN: 0021-9673

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The chromatog. properties of 29 basic drugs were studied by varying the pH and the concentration of inorg. ions in the mobile phase. It was observed that the

chromatog. performance of most hydrophobic basic drug compds. could be strongly enhanced by decreasing the pH in the mobile phase from 7 to 4-6. The enantioselectivity increased and a much faster resolution was obtained. The results indicate that ion exchange and ion-pair distribution may be involved in the retention process of cationic drug enantiomers. Increasing the concentration of acetate and phosphate increases the retention

of

the enantiomers of the drug compds. The relative contribution of the two retention processes can be affected by the pH and the nature and the concentration of the ions in the mobile phase. Decreasing the pH reduces

the

influence of the ion-exchange process since the neg. charge of the protein is decreased. The enantioselectivity is also greatly affected by increasing salt concentration

L3 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:147740 HCAPLUS

DOCUMENT NUMBER: 110:147740

TITLE: Effects of some centrally acting muscle relaxants on spinal root potentials: a comparative study

AUTHOR(S): Farkas, S.; Tarnawa, I.; Berzsenyi, P.
CORPORATE SOURCE: Pharmacol. Res. Cent., Gedeon Richter Ltd., Budapest, Hung.
SOURCE: Neuropharmacology (1989), 28(2), 161-73
CODEN: NEPHBW; ISSN: 0028-3908
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of i.v. administered mephenesin, tolperisone, baclofen, diazepam, and midazolam on reflex activity were studied in unanesthetized spinal cats. Mephenesin (12.5-50 mg/kg) caused a dose-dependent reduction in the polysynaptic and the dorsal root reflexes, slightly decreased the dorsal root potential, but minimally affected the monosynaptic ventral root reflex. Tolperisone (2.5-10 mg/kg) dose-dependently inhibited both ventral root reflexes and the dorsal root reflex. It slightly prolonged the dorsal root potential without affecting the amplitude. Baclofen (0.5 mg/kg) abolished the monosynaptic reflex, partially inhibited the polysynaptic reflex, while dorsal root responses were less attenuated. Both benzodiazepines exerted similar actions, both qual. as well as quant.: the polysynaptic reflex was partially reduced while the monosynaptic reflex was not modified by diazepam or midazolam. Dorsal root responses were enhanced and the half-time of decay of the dorsal root potential was prolonged. Different patterns of action of the muscle relaxants studied are discussed in terms of their possible mechanisms of action. Profound depressant effects of mephenesin and tolperisone on the dorsal root reflex are in contrast to the small effect of both drugs on the dorsal root potential and might reflect their inhibition of spike-generating mechanisms. For a yet unknown reason, various spinal pathways are affected differentially by baclofen. In spinal cats, the reduction by benzodiazepines of the polysynaptic reflex may be related to the potentiation of some unidentified GABAergic inhibitory processes. The use of water-soluble midazolam, as a model compound instead of diazepam, is suggested because the usual organic solvents for diazepam may affect its action.

=> d 14 ibib abs hitstr tot

L4 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:493695 HCAPLUS
DOCUMENT NUMBER: 141-54355
TITLE: Method for producing salts of tolperisone
INVENTOR(S): Czollner, Laszlo; Kaelz, Beate; Rothenburger, Jan; Welzig, Stefan
PATENT ASSIGNEE(S): Sanochemia Pharmazeutika A.-G., Austria
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

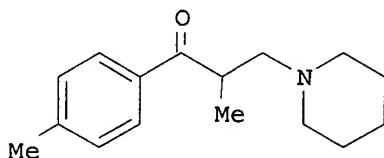
AT 348821	T	20070115	AT 2003-812092	20030331
ES 2275140	T3	20070601	ES 2003-3812092	20030331
MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228

PRIORITY APPLN. INFO.:

AT 2002-1823	A	20021205
EP 2003-812092	A	20030331
WO 2003-AT92	W	20030331

OTHER SOURCE(S): CASREACT 141:54355

GI



I

AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propio-phenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropio-phenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after the reaction mixture has cooled down. Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropio-phenone with piperidine hydrochloride and 1,2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution with MeOCMe₃ when at room temperature and recrystn. from 2-butanone containing Me₂CHOH.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:798921 HCAPLUS

DOCUMENT NUMBER: 132:137263

TITLE: Synthesis of 3H-tolperisone

AUTHOR(S): Dietrich, Axel; Fels, Gregor

CORPORATE SOURCE: Universitaet-Gesamthochschule Paderborn, FB 13 -

SOURCE: Organische Chemie, Paderborn, D-33098, Germany
Journal of Labelled Compounds & Radiopharmaceuticals (1999), 42(12), 1125-1134

10537434:trn

CODEN: JLCRD4; ISSN: 0362-4803

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Tolperisone has been tritiated to 50 Ci/mmol specific activity in order to use this compound in the study of muscle relaxant binding. Of the two reaction pathways investigated, hydrogenolytic exchange of aromatic bromine is favored over hydrogenation of a double bond.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 ibib abs hitstr tot

L5 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:493695 HCAPLUS

DOCUMENT NUMBER: 141:54355

TITLE: Method for producing salts of tolperisone

INVENTOR(S): Czollner, Laszlo; Kaelz, Beate; Rothenburger, Jan; Welzig, Stefan

PATENT ASSIGNEE(S): Sanochemia Pharmazeutika A.-G., Austria

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

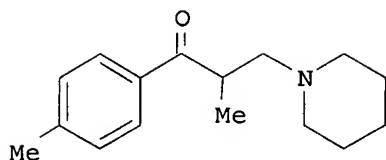
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 348821	T	20070115	AT 2003-812092	20030331
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MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228
PRIORITY APPLN. INFO.:			AT 2002-1823	A 20021205
			EP 2003-812092	A 20030331
			WO 2003-AT92	W 20030331

OTHER SOURCE(S): CASREACT 141:54355

GI



I

AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propiofenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropiophenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after the reaction mixture has cooled down. Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropiophenone with piperidine hydrochloride and 1,2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution with MeOCMe₃ when at room temperature and recrystn.

from 2-butanone containing Me₂CHOH.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	68.98	69.40
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.68	-4.68

FILE 'REGISTRY' ENTERED AT 15:16:54 ON 04 SEP 2007

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STRUCTURE FILE UPDATES: 3 SEP 2007 HIGHEST RN 945955-20-4
 DICTIONARY FILE UPDATES: 3 SEP 2007 HIGHEST RN 945955-20-4

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of

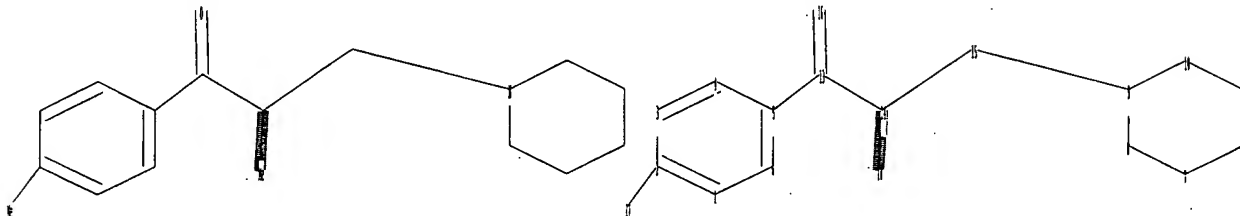
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experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

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chain nodes :

13 14 15 16 17 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

2-17 5-13 9-15 13-14 13-16 14-15 14-18

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

7-8 7-12 8-9 9-10 9-15 10-11 11-12 13-16

exact bonds :

2-17 5-13 13-14 14-15 14-18

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 7 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

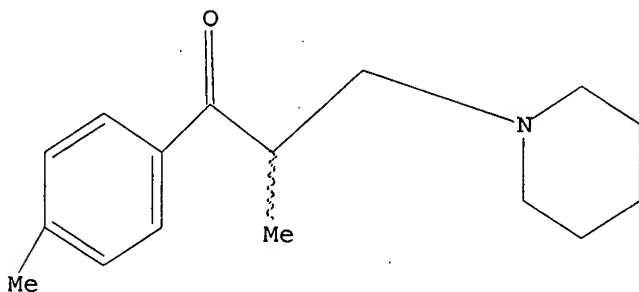
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

L6 STR



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Structure attributes must be viewed using STN Express query preparation.

=> s l6

SAMPLE SEARCH INITIATED 15:17:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 156 TO ITERATE

100.0% PROCESSED 156 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2371 TO 3869
PROJECTED ANSWERS: 3 TO 163

L7 3 SEA SSS SAM L6

=> s l6 sss full

FULL SEARCH INITIATED 15:17:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3389 TO ITERATE

100.0% PROCESSED 3389 ITERATIONS 90 ANSWERS
SEARCH TIME: 00.00.01

L8 90 SEA SSS FUL L6

=> FIL HCAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.10	241.50

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.68

FILE 'HCAPLUS' ENTERED AT 15:17:31 ON 04 SEP 2007
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FILE COVERS 1907 - 4 Sep 2007 VOL 147 ISS 11
FILE LAST UPDATED: 3 Sep 2007 (20070903/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

10537434.trn

=> s 18

L9 245 L8

=> s 19 and 4-methylpropiophenone

5662776 4

496 METHYLPROPIOPHENONE

13 METHYLPROPIOPHENONES

504 METHYLPROPIOPHENONE

(METHYLPROPIOPHENONE OR METHYLPROPIOPHENONES)

71 4-METHYLPROPIOPHENONE

(4 (W) METHYLPROPIOPHENONE)

L10 4 L9 AND 4-METHYLPROPIOPHENONE

=> s 19 and piperidine hydrochloride

60254 PIPERIDINE

3576 PIPERIDINES

61183 PIPERIDINE

(PIPERIDINE OR PIPERIDINES)

164720 HYDROCHLORIDE

9820 HYDROCHLORIDES

169908 HYDROCHLORIDE

(HYDROCHLORIDE OR HYDROCHLORIDES)

1044 PIPERIDINE HYDROCHLORIDE

(PIPERIDINE (W) HYDROCHLORIDE)

L11 7 L9 AND PIPERIDINE HYDROCHLORIDE

=> s 19 and 1,2-dioxolane

9270525 1

9277378 2

15717 DIOXOLANE

2226 DIOXOLANES

16240 DIOXOLANE

(DIOXOLANE OR DIOXOLANES)

223 1,2-DIOXOLANE

(1 (W) 2 (W) DIOXOLANE)

L12 1 L9 AND 1,2-DIOXOLANE

=> s 111 and 1,2-dioxolane

9270525 1

9277378 2

15717 DIOXOLANE

2226 DIOXOLANES

16240 DIOXOLANE

(DIOXOLANE OR DIOXOLANES)

223 1,2-DIOXOLANE

(1 (W) 2 (W) DIOXOLANE)

L13 1 L11 AND 1,2-DIOXOLANE

=> d his

(FILE 'HOME' ENTERED AT 15:03:48 ON 04 SEP 2007)

FILE 'HCAPLUS' ENTERED AT 15:04:43 ON 04 SEP 2007

L1 166 S TOLPERISONE

L2 0 S L1 AND METHOD FOR MANUFACTURING

L3 3 S L1 AND PROCESS

L4 2 S L1 AND 4-METHYLPROPIOPHENONE

L5 1 S L1 AND 1,2-DIOXOLANE

FILE 'REGISTRY' ENTERED AT 15:16:54 ON 04 SEP 2007

10537434.trn

L6 STRUCTURE UPLOADED
L7 3 S L6
L8 90 S L6 SSS FULL

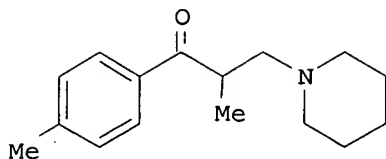
FILE 'HCAPLUS' ENTERED AT 15:17:31 ON 04 SEP 2007

L9 245 S L8
L10 4 S L9 AND 4-METHYLPROPIOPHENONE
L11 7 S L9 AND PIPERIDINE HYDROCHLORIDE
L12 1 S L9 AND 1,2-DIOXOLANE
L13 1 S L11 AND 1,2-DIOXOLANE

=> d l10 ibib abs hitstr tot

L10 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:493695 HCAPLUS
DOCUMENT NUMBER: 141:54355
TITLE: Method for producing salts of tolperisone
INVENTOR(S): Czollner Laszlo; Kaelz, Beate; Rothenburger, Jan;
Wollgast, Stefan
PATENT ASSIGNEE(S): Sanochemia Pharmazeutika A.-G., Austria
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 348821	T	20070115	AT 2003-812092	20030331
ES 2275140	T3	20070601	ES 2003-3812092	20030331
MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228
PRIORITY APPLN. INFO.:			AT 2002-1823	A 20021205
			EP 2003-812092	A 20030331
			WO 2003-AT92	W 20030331
OTHER SOURCE(S):		CASREACT 141:54355		
GI				



I

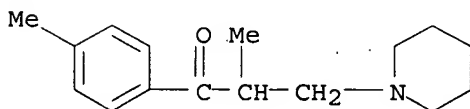
AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propiofenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropiofenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after the reaction mixture has cooled down. Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropiofenone with piperidine hydrochloride and 1,2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution with MeOCMe₃ when at room temperature and recrystn. from 2-butanone containing Me₂CHOH.

IT 728-88-1DP, Tolperisone, salts 3644-61-9P, Tolperisone hydrochloride

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(method for producing salts of tolperisone)

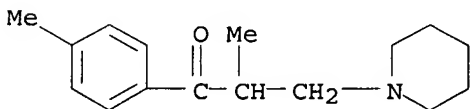
RN 728-88-1 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L10 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:798921 HCAPLUS

DOCUMENT NUMBER: 132:137263

TITLE: Synthesis of 3H-tolperisone

AUTHOR(S): Dietrich, Axel; Fels, Gregor

CORPORATE SOURCE: Universitaet-Gesamthochschule Paderborn, FB 13 -

Organische Chemie, Paderborn, D-33098, Germany

SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals
(1999), 42(12), 1125-1134

CODEN: JLCRD4; ISSN: 0362-4803

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Tolperisone has been tritiated to 50 Ci/mmol specific activity in order to use this compound in the study of muscle relaxant binding. Of the two reaction pathways investigated, hydrogenolytic exchange of aromatic bromine is favored over hydrogenation of a double bond.

IT 256469-57-5P

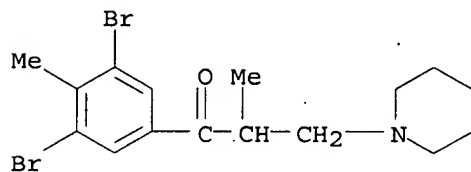
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hydrogenolysis with H₂, D₂, and T₂; synthesis of ring-labeled

3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

RN 256469-57-5 HCAPLUS

CN 1-Propanone, 1-(3,5-dibromo-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

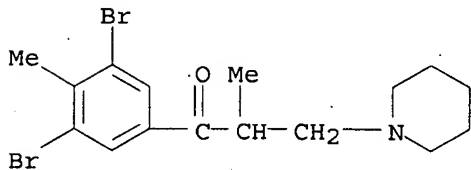
IT 256469-59-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hydrogenolysis; synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

RN 256469-59-7 HCAPLUS

CN 1-Propanone, 1-(3,5-dibromo-4-methylphenyl)-2-methyl-3-(1-piperidinyl)- (9CI) (CA INDEX NAME)



IT 256469-62-2P

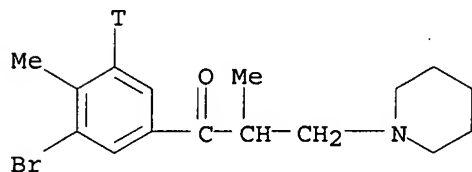
RL: BYP (Byproduct); REM (Removal or disposal); PREP (Preparation); PROC

(Process)

(synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

RN 256469-62-2 HCAPLUS

CN 1-Propanone, 1-(5-bromo-4-methylphenyl-3-t)-2-methyl-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 728-88-1P, Tolperisone 3644-61-9P, Tolperisone

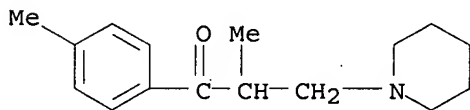
hydrochloride 256469-60-0P 256469-61-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

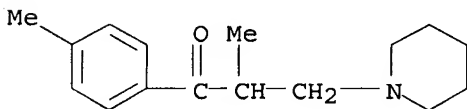
RN 728-88-1 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)

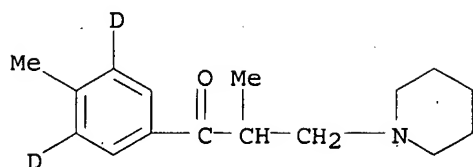


● HCl

RN 256469-60-0 HCAPLUS

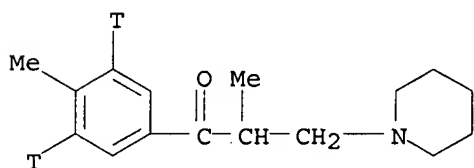
CN 1-Propanone, 2-methyl-1-(4-methylphenyl-3,5-d2)-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)

10537434.trn



● HCl

RN 256469-61-1 HCAPLUS
CN 1-Propanone, 2-methyl-1-(4-methylphenyl-3,5-t2)-3-(1-piperidinyl)-,
hydrochloride (9CI) (CA INDEX NAME)

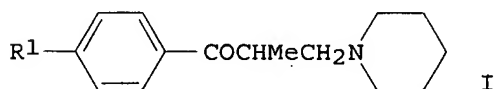


● HCl

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:255322 HCAPLUS
DOCUMENT NUMBER: 116:255322
TITLE: Preparation of aminopropiophenone derivatives or their
salts as spasmolytics
INVENTOR(S): Ueda, Yutaka; Nakayama, Hajime; Ishikura, Masatoshi;
Imai, Masahiro
PATENT ASSIGNEE(S): Toyo Pharmar Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04005283	A	19920109	JP 1990-107856	19900424
PRIORITY APPLN. INFO.:			JP 1990-107856	19900424
OTHER SOURCE(S):			CASREACT 116:255322; MARPAT 116:255322	
GI				

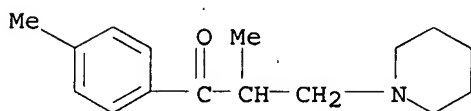


AB The title derivs. I (R1 = C1-2 alkyl) or their salts, useful as spasmolytics (no data), are prepared by treating 4-R1C6H4COEt with reaction products prepared from XCH2OR2 (R2 = C1-4 alkyl; X = halo) and piperidine. A solution of ClCH2OMe in DMF was added dropwise into a solution of piperidine in DMF, then the reaction mixture was treated dropwise with a solution of 4-MeC6H4COEt in DMF at room temperature and stirred at 90-100° for 2 h to give 91% I-HCl (R1 = Me).

IT 728-88-1P 3644-61-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as spasmolytic)

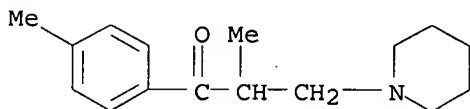
RN 728-88-1 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L10 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1966:75722 HCAPLUS

DOCUMENT NUMBER: 64:75722

ORIGINAL REFERENCE NO.: 64:14173g-h

TITLE: Amino ketones

INVENTOR(S): Nakanishi, Michio; Kuriyama, Tsuneto

PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.

SOURCE: 2 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

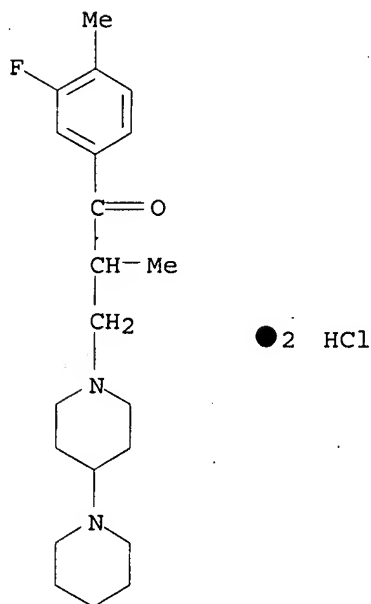
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 41002553	B4	19660218	JP	19630213

PRIORITY APPLN. INFO.: JP 19630213

AB Manufacture of β -R-substituted 3-fluoro-4-methyl- α -methylpropiophenones (I), useful as antispasmodics, was described. Thus, a mixture of 0.83 g. 3-fluoro-4-methylpropiophenone, 1

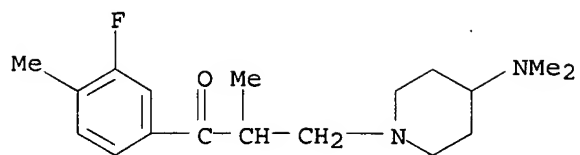
g. 4-dimethylaminopiperidine-2HCl, 0.37 cc. paraformaldehyde, 4 cc. EtOH, 0.05 cc. concentrated HCl, and 1 cc. H₂O is refluxed for 23 hrs., PhMe and 10% HCl are added, the HCl layer is washed with PhMe, made alkaline, and extracted with PhMe to give I (R = dimethylaminopiperidino), dihydrochloride, m. 290°. Similarly prepared are the following I (R and m.p. of the dihydrochloride are given): 4-pyrrolidinopiperidino, > 240°; 4-piperidinopiperidino, > 330°; 4-(p-chlorophenyl)-4-hydroxypiperidino, -- (maleate m. 169°).

IT 5731-24-8P, Propiophenone, 3'-fluoro-2,4'-dimethyl-3-(4-piperidinopiperidino)-, dihydrochloride 5737-88-2P, Propiophenone, 3-[4-(dimethylamino)piperidino]-3'-fluoro-2,4'-dimethyl-, dihydrochloride 5737-89-3P, Propiophenone, 3-[4-(p-chlorophenyl)-4-hydroxypiperidino]-3'-fluoro-2,4'-dimethyl-, maleate (1:1) 5747-94-4P, Propiophenone, 3'-fluoro-2,4'-dimethyl-3-[4-(1-pyrrolidinyl)piperidino]-, dihydrochloride 6912-50-1P, Propiophenone, 3-[4-(p-chlorophenyl)-4-hydroxypiperidino]-3'-fluoro-2,4'-dimethyl-
 RL: PREP (Preparation)
 (preparation of)
 RN 5731-24-8 HCAPLUS
 CN Propiophenone, 3'-fluoro-2,4'-dimethyl-3-(4-piperidinopiperidino)-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



RN 5737-88-2 HCAPLUS
 CN Propiophenone, 3-[4-(dimethylamino)piperidino]-3'-fluoro-2,4'-dimethyl-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)

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● 2 HCl

RN 5737-89-3 HCAPLUS

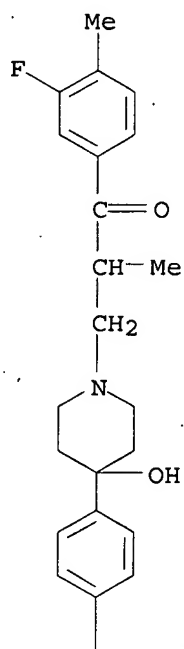
CN Propiophenone, 3-[4-(p-chlorophenyl)-4-hydroxypiperidino]-3'-fluoro-2,4'-dimethyl-, maleate (1:1) (salt) (8CI) (CA INDEX NAME)

CM 1

CRN 6912-50-1

CMF C22 H25 Cl F N O2

PAGE 1-A



PAGE 2-A

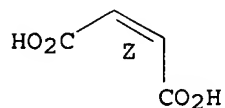
Cl

CM 2

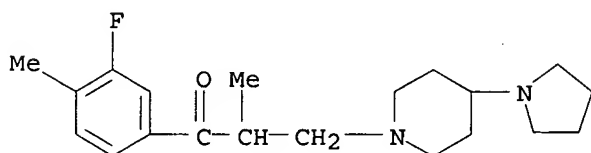
10537434.trn

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



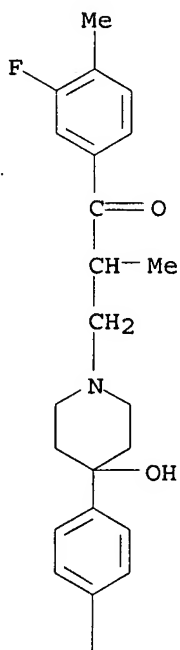
RN 5747-94-4 HCAPLUS
CN Propiophenone, 3'-fluoro-2,4'-dimethyl-3-[4-(1-pyrrolidinyl)piperidino]-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



● 2 HCl

RN 6912-50-1 HCAPLUS
CN Propiophenone, 3-[4-(p-chlorophenyl)-4-hydroxypiperidino]-3'-fluoro-2,4'-dimethyl- (7CI, 8CI) (CA INDEX NAME)

PAGE 1-A

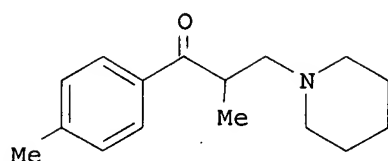


C1

=> d l11 ibib abs hitstr tot

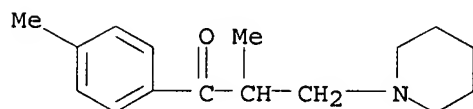
L11 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:493695 HCAPLUS
 DOCUMENT NUMBER: 141:54355
 TITLE: Method for producing salts of tolperisone
 INVENTOR(S): Czollner, Laszlo; Kaelz, Beate; Rothenburger, Jan;
 Welzig, Stefan
 PATENT ASSIGNEE(S): Sanochemia Pharmazeutika A.-G., Austria
 SOURCE: PCT Int. Appl., 19 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 348821	T	20070115	AT 2003-812092	20030331
ES 2275140	T3	20070601	ES 2003-3812092	20030331
MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228
PRIORITY APPLN. INFO.:			AT 2002-1823	A 20021205
			EP 2003-812092	A 20030331
			WO 2003-AT92	W 20030331
OTHER SOURCE(S):		CASREACT 141:54355		
GI				

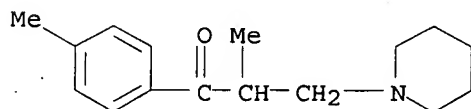


I

- AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propio-phenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropiophenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after the reaction mixture has cooled down. Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropiophenone with piperidine hydrochloride and 1,2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution with MeOCMe₃ when at room temperature and recrystn. from 2-butanone containing Me₂CHOH.
- IT 728-88-1DP, Tolperisone, salts 3644-61-9P, Tolperisone hydrochloride
 RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
 (method for producing salts of tolperisone)
- RN 728-88-1 HCAPLUS
- CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



- RN 3644-61-9 HCAPLUS
- CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

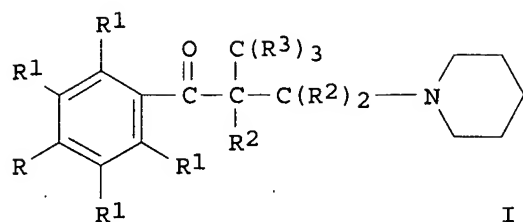
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

10537434.trn

ACCESSION NUMBER: 2002:849606 HCAPLUS
DOCUMENT NUMBER: 137:352891
TITLE: Preparation of deuterated 3-(piperidino)propiophenones
for use in the treatment of muscle diseases
INVENTOR(S): Alken, Rudolf-Gisbert; Stabingis, Thomas
PATENT ASSIGNEE(S): Berolina Drug Development AB, Swed.
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002088100	A2	20021107	WO 2002-DE1607	20020429
WO 2002088100	A3	20030530		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10123129	A1	20021114	DE 2001-10123129	20010502
CA 2446890	A1	20021107	CA 2002-2446890	20020429
AU 2002257562	A1	20021111	AU 2002-257562	20020429
AU 2002257562	B2	20070111		
EP 1383752	A2	20040128	EP 2002-727303	20020429
EP 1383752	B1	20050622		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 200400077	A2	20040428	HU 2004-77	20020429
CN 1527823	A	20040908	CN 2002-810612	20020429
JP 2004527558	T	20040909	JP 2002-585402	20020429
AT 298324	T	20050715	AT 2002-727303	20020429
NZ 529586	A	20050729	NZ 2002-529586	20020429
PT 1383752	T	20051130	PT 2002-727303	20020429
ES 2244768	T3	20051216	ES 2002-2727303	20020429
RU 2296755	C2	20070410	RU 2003-133924	20020429
CN 101002770	A	20070725	CN 2006-10148569	20020429
NO 2003004863	A	20031230	NO 2003-4863	20031031
US 2004186136	A1	20040923	US 2004-476743	20040507
PRIORITY APPLN. INFO.:				
			DE 2001-10123129	A 20010502
			CN 2002-810612	A3 20020429
			WO 2002-DE1607	W 20020429
OTHER SOURCE(S): CASREACT 137:352891; MARPAT 137:352891				
GI				



AB Deuterated 3-piperidinopropiophenones [I; R = alkyl, (mono-to-per)deuterated C₃ alkyl; R₁, R₂ = H, D; such that ≥1 of R, R₁, R₂ = D or a D-containing residue] as well as their pharmaceutically acceptable salts, useful in the production of medicaments for the treatment of muscular diseases, are prepared. Thus, 4'-(trideuteromethyl)-2',3',5',6'-tetra-deuteropropiophenone was reacted with piperidine hydrochloride and paraformaldehyde, producing 4'-(trideuteromethyl)-2',3',5',6'-tetra-deutero-2-methyl-2-(piperidino)propiophenone (m.p. 117-118°) in 72% yield.

IT 474641-09-3P 474641-10-6P 474641-11-7P

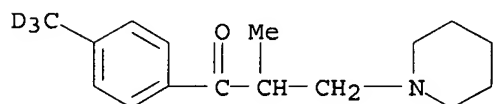
474641-12-8P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of deuterated 3-(piperidino)propiophenones)

RN 474641-09-3 HCAPLUS

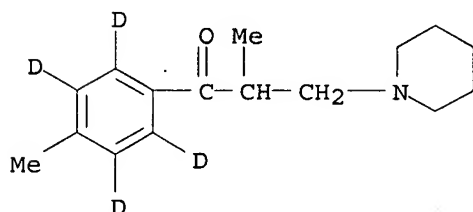
CN 1-Propanone, 2-methyl-1-[4-(methyl-d₃)phenyl]-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 474641-10-6 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl-2,3,5,6-d₄)-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)

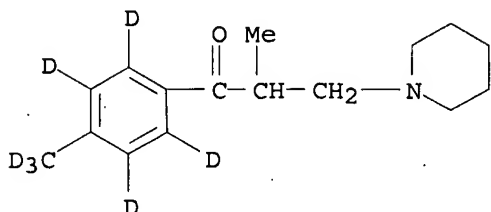


● HCl

10537434.trn

RN 474641-11-7 HCAPLUS

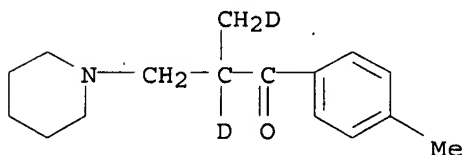
CN 1-Propanone, 2-methyl-1-[4-(methyl-d3)phenyl-2,3,5,6-d4]-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 474641-12-8 HCAPLUS

CN 1-Propanone-2,3-d2, 1-(4-methylphenyl)-2-(1-piperidinylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 474641-14-0P 474641-15-1P 474641-19-5P

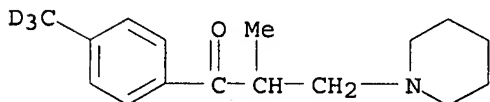
474641-20-8P 474641-21-9P 474641-22-0P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of deuterated 3-(piperidino)propiophenones for use in the treatment of muscle diseases)

RN 474641-14-0 HCAPLUS

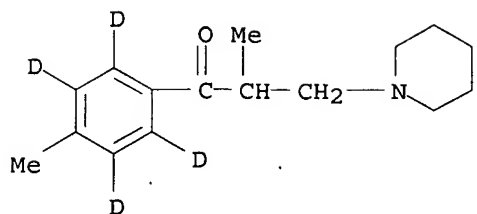
CN 1-Propanone, 2-methyl-1-[4-(methyl-d3)phenyl]-3-(1-piperidinyl)- (9CI) (CA INDEX NAME)



RN 474641-15-1 HCAPLUS

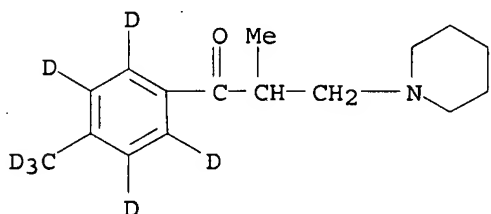
CN 1-Propanone, 2-methyl-1-(4-methylphenyl-2,3,5,6-d4)-3-(1-piperidinyl)- (9CI) (CA INDEX NAME)

10537434.trn



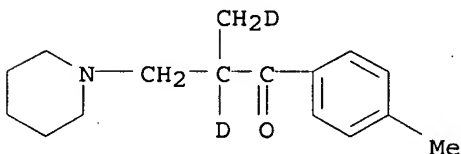
RN 474641-19-5 HCAPLUS

CN 1-Propanone, 2-methyl-1-[4-(methyl-d3)phenyl-2,3,5,6-d4]-3-(1-piperidinyl)-
(9CI) (CA INDEX NAME)



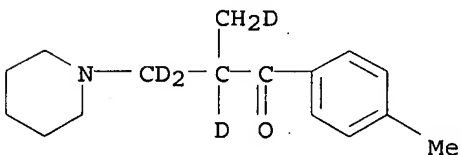
RN 474641-20-8 HCAPLUS

CN 1-Propanone-2,3-d2, 1-(4-methylphenyl)-2-(1-piperidinylmethyl)- (9CI) (CA
INDEX NAME)



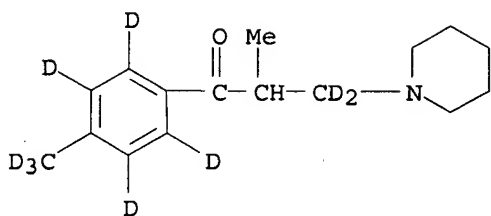
RN 474641-21-9 HCAPLUS

CN 1-Propanone-2,3,3-d3, 2-(methyl-d)-1-(4-methylphenyl)-3-(1-piperidinyl)-
(9CI) (CA INDEX NAME)

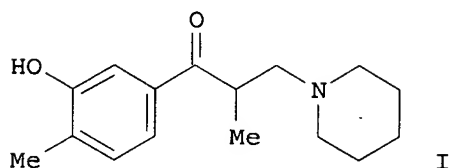


RN 474641-22-0 HCAPLUS

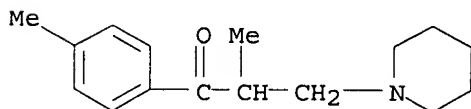
CN 1-Propanone-3,3-d2, 2-methyl-1-[4-(methyl-d3)phenyl-2,3,5,6-d4]-3-(1-
piperidinyl)- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2000:324108 HCAPLUS
 DOCUMENT NUMBER: 133:104950
 TITLE: Synthesis and resolution of a Tolperisone metabolite
 AUTHOR(S): Balint, Jozsef; Hell, Zoltan; Markovits, Imre;
 Parkanyi, Laszlo; Fogassy, Elemer
 CORPORATE SOURCE: Department of Organic Chemical Technology, Budapest
 University of Technology and Economics, Budapest,
 H-1521, Hung.
 SOURCE: Tetrahedron: Asymmetry (2000), 11(6), 1323-1329
 CODEN: TASYE3; ISSN: 0957-4166
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB The metabolite of Tolperisone, (hydroxymethylphenyl)methyl(piperidinyl)propanone I, was prepared and resolved. Racemic I underwent resolution via the enantiomers of its camphor-10-sulfonic acid salt. The absolute configuration (+)-I was (S) as determined by x-ray diffraction anal. Enantiomeric excesses were determined by ¹H NMR spectroscopy.
 IT 728-88-1, Tolperisone
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (preparation, resolution, and crystal structure of Tolperisone metabolite (hydroxymethylphenyl)methylpiperidinopropanone)
 RN 728-88-1 HCAPLUS
 CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



IT 283585-19-3

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RL: PRP (Properties)

(preparation, resolution, and crystal structure of Tolperisone metabolite
(hydroxymethylphenyl)methylpiperidinopropanone)

RN 283585-19-3 HCAPLUS

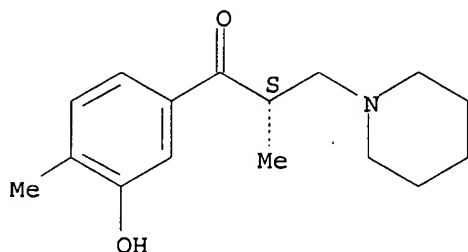
CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
(1S,4R)-, compd. with (2S)-1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-
piperidinyl)-1-propanone, hydrate (50:50:11) (9CI) (CA INDEX NAME)

CM 1

CRN 283585-05-7

CMF C16 H23 N O2

Absolute stereochemistry. Rotation (+).

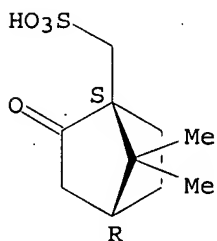


CM 2

CRN 3144-16-9

CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).



IT 283585-06-8P

RL: PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN
(Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, resolution, and crystal structure of Tolperisone metabolite
(hydroxymethylphenyl)methylpiperidinopropanone)

RN 283585-06-8 HCAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
(1S,4R)-, compd. with (2S)-1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-
piperidinyl)-1-propanone (1:1) (9CI) (CA INDEX NAME)

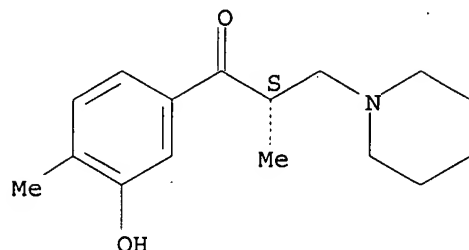
CM 1

CRN 283585-05-7

CMF C16 H23 N O2

10537434.trn

Absolute stereochemistry. Rotation (+).

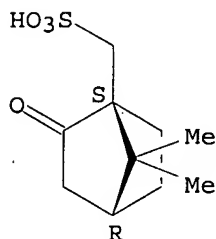


CM 2

CRN 3144-16-9

CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).

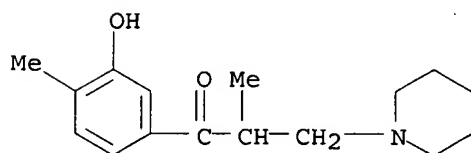


IT 59303-39-8P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, resolution, and crystal structure of Tolperisone metabolite (hydroxymethylphenyl)methylpiperidinopropanone)

RN 59303-39-8 HCAPLUS

CN 1-Propanone, 1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-
(9CI) (CA INDEX NAME)



IT 283585-02-4P 283585-05-7P 283585-11-5P

283585-12-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, resolution, and crystal structure of Tolperisone metabolite (hydroxymethylphenyl)methylpiperidinopropanone)

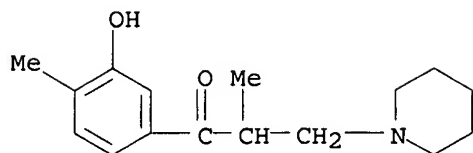
RN 283585-02-4 HCAPLUS

CN 1-Propanone, 1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-,
(2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

10537434.trn

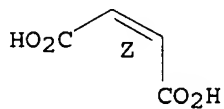
CRN 59303-39-8
CMF C16 H23 N O2



CM 2

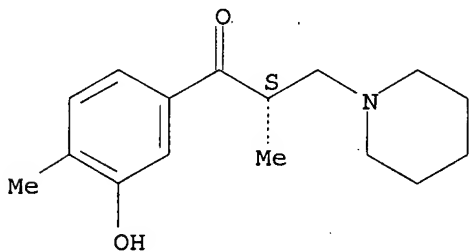
CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



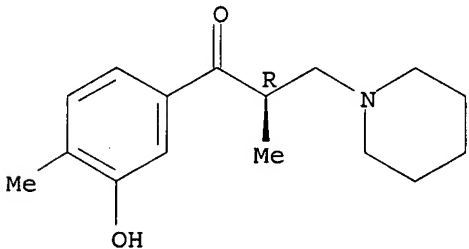
RN 283585-05-7 HCAPLUS
CN 1-Propanone, 1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-,
(2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 283585-11-5 HCAPLUS
CN 1-Propanone, 1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-,
(2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



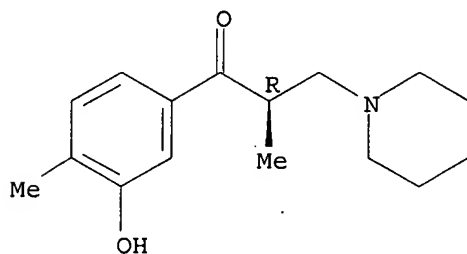
10537434.trn

RN 283585-12-6 HCAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonic acid, 7,7-dimethyl-2-oxo-,
(1R,4S)-, compd. with (2R)-1-(3-hydroxy-4-methylphenyl)-2-methyl-3-(1-
piperidinyl)-1-propanone (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 283585-11-5
CMF C16 H23 N O2

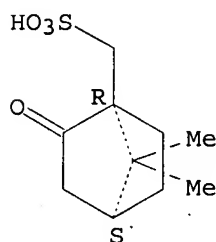
Absolute stereochemistry. Rotation (-).



CM 2

CRN 35963-20-3
CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:798921 HCAPLUS
DOCUMENT NUMBER: 132:137263
TITLE: Synthesis of 3H-tolperisone
AUTHOR(S): Dietrich, Axel; Fels, Gregor
CORPORATE SOURCE: Universitaet-Gesamthochschule Paderborn, FB 13 -
Organische Chemie, Paderborn, D-33098, Germany
SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals
(1999), 42(12), 1125-1134
CODEN: JLCRD4; ISSN: 0362-4803
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Tolperisone has been tritiated to 50 Ci/mmol specific activity in order to

use this compound in the study of muscle relaxant binding. Of the two reaction pathways investigated, hydrogenolytic exchange of aromatic bromine is favored over hydrogenation of a double bond.

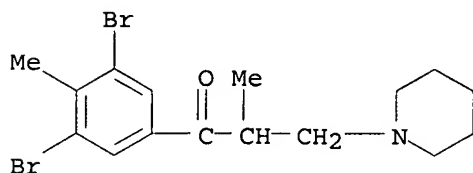
IT 256469-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hydrogenolysis with H₂, D₂, and T₂; synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

RN 256469-57-5 HCAPLUS

CN 1-Propanone, 1-(3,5-dibromo-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

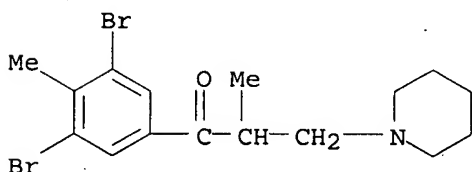
IT 256469-59-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(hydrogenolysis; synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

RN 256469-59-7 HCAPLUS

CN 1-Propanone, 1-(3,5-dibromo-4-methylphenyl)-2-methyl-3-(1-piperidinyl)-, (9CI) (CA INDEX NAME)



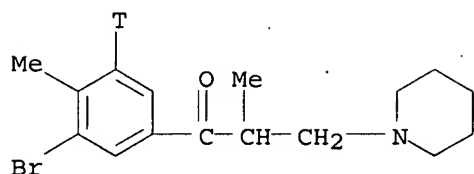
IT 256469-62-2P

RL: BYP (Byproduct); REM (Removal or disposal); PREP (Preparation); PROC (Process)

(synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of aromatic bromine)

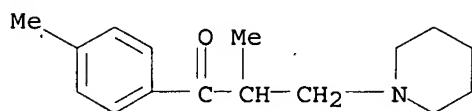
RN 256469-62-2 HCAPLUS

CN 1-Propanone, 1-(5-bromo-4-methylphenyl-3-t)-2-methyl-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)

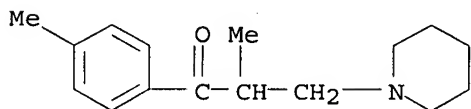


● HCl

IT 728-88-1P, Tolperisone 3644-61-9P, Tolperisone
hydrochloride 256469-60-0P 256469-61-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of ring-labeled 3H-tolperisone by hydrogenolytic exchange of
aromatic bromine)
RN 728-88-1 HCAPLUS
CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX
NAME)

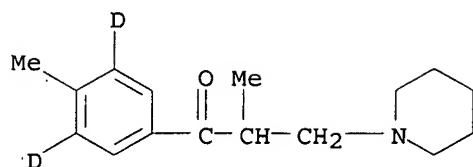


RN 3644-61-9 HCAPLUS
CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride
(1:1) (CA INDEX NAME)



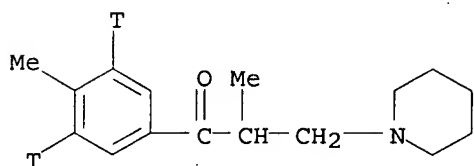
● HCl

RN 256469-60-0 HCAPLUS
CN 1-Propanone, 2-methyl-1-(4-methylphenyl-3,5-d2)-3-(1-piperidinyl)-,
hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 256469-61-1 HCAPLUS
 CN 1-Propanone, 2-methyl-1-(4-methylphenyl-3,5-t2)-3-(1-piperidinyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 7 HCAPLUS. COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1985:53978 HCAPLUS
 DOCUMENT NUMBER: 102:53978
 TITLE: Electron-beam, x-ray and ion beam-sensitive resist
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59171951	A	19840928	JP 1983-45996	19830322

PRIORITY APPLN. INFO.: JP 1983-45996 19830322

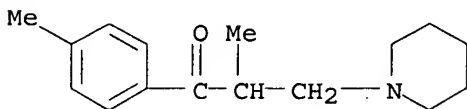
AB A radiation (x-ray, electron beam, ion beam)-sensitive resist composition contains a polymer with the repeating group RC(COR1)CH2 and(or) RC(CO2R1)CH2 (where R = H, Me and R1 = alkyl, aryl, aralkyl) 5-95 and an organic compound (solid at room temperature) containing ≥2 acryloyloxy, methacryloyloxy, or vinyl groups 95-5%. The neg.-type resist is useful in forming micropatterns during semiconductor and magnetic device fabrication.

IT 3644-61-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of)

10537434.trn

RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride
(1:1) (CA INDEX NAME)



● HCl

L11 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:15330 HCAPLUS

DOCUMENT NUMBER: 100:15330

TITLE: Photosensitive resin compositions

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

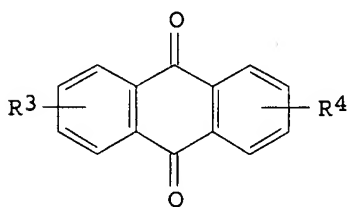
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

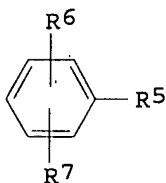
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57168902	A	19821018	JP 1981-53177	19810410
PRIORITY APPLN. INFO.: GI			JP 1981-53177	19810410



I



II

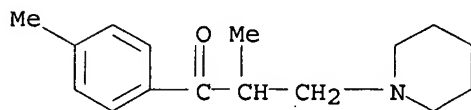
AB Photosensitive resin compns. are composed of (1) 80-99.9 weight% of a polymer having repeating units of the formula $\text{CH}_2\text{CMeC}(\text{CO}-p\text{-C}_6\text{H}_4\text{R})$ ($\text{R} = \text{H}, \text{Me}, \text{MeO}, \text{Cl}, \text{Br}, \text{I}, \text{NH}_2, \text{NMe}_2$) 10-100 and other repeating units from vinyl monomers 0-90 mol% and (2) 0.1-20 weight% of ≥ 1 sensitizer selected from $\text{R}_1\text{C}_6\text{H}_4\text{COC}_6\text{H}_4\text{R}_2$ ($\text{R}_1, \text{R}_2 = \text{H}, \text{alkyl}, \text{alkoxy}, \text{OH}, \text{NH}_2, \text{NO}_2, \text{halo}$), I ($\text{R}_3, \text{R}_4 = \text{H}, \text{alkyl}, \text{alkoxy}, \text{OH}, \text{NH}_2, \text{NO}_2, \text{halo}$), II ($\text{R}_5 = \text{OR}_8, \text{CO}_2\text{R}_8; \text{R}_6, \text{R}_7 = \text{H}, \text{alkyl}, \text{alkoxy}, \text{OH}, \text{NH}_2, \text{NO}_2, \text{halo}; \text{R}_8 = \text{H}, \text{alkyl}$), and $\text{R}_9\text{C}_6\text{H}_4\text{COZC}_6\text{H}_4\text{R}_{10}$ ($\text{R}_9, \text{R}_{10} = \text{H}, \text{alkyl}, \text{alkoxy}, \text{OH}, \text{NH}_2, \text{NO}_2, \text{halo}; \text{Z} = \text{CO}, \text{CHOH}$). The photosensitive compns. are especially useful as pos.-working UV resists. Thus, Me methacrylate-Ph isopropenyl ketone copolymer 95 and p-methoxybenzoic acid 5 parts were mixed in Me isobutyl ketone to give a resist solution, coated on a Si wafer, imagewise exposed to a Hg lamp, and developed to form high-resolution resist patterns.

IT 3644-61-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of).

RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride
(1:1) (CA INDEX NAME)



● HCl

L11 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:82425 HCAPLUS
DOCUMENT NUMBER: 98:82425
TITLE: Multilayer interconnection structure
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

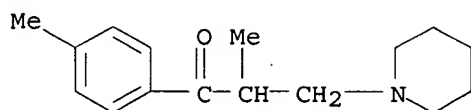
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57159045	A	19821001	JP 1981-44031	19810327
PRIORITY APPLN. INFO.:			JP 1981-44031	19810327

AB A polymer from R = p-C6H4COCMe:CH2 (I) (R = H, Me, MeO, Cl, Br, I, or Me2N) or copolymer from I \geq 10 mol% and CH2:CMeCO2R1 (R1 = H, Cl-4 alkyl, cyclohexyl, or Ph), methacrylonitrile, methylisopropenyl ketone, α -Me styrene, and/or isobutylene \leq 90 mol% is used as a photoresist for opening windows in insulator films for a multilayer interconnection.

IT 3644-61-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of)

RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride
(1:1) (CA INDEX NAME)



● HCl

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L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:493695 HCAPLUS

DOCUMENT NUMBER: 141:54355

TITLE: Method for producing salts of tolperisone

INVENTOR(S): Czollner, Laszlo; Kaelz, Beate; Rothenburger, Jan; Welzig, Stefan

PATENT ASSIGNEE(S): Sandoz Pharma AG, Austria

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

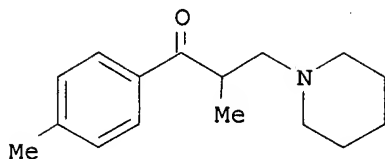
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 348821	T	20070115	AT 2003-812092	20030331
ES 2275140	T3	20070601	ES 2003-3812092	20030331
MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228
PRIORITY APPLN. INFO.:			AT 2002-1823	A 20021205
			EP 2003-812092	A 20030331
			WO 2003-AT92	W 20030331

10537434.trn

OTHER SOURCE(S):
GI

CASREACT 141:54355



I

AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propiofenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropiofenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after the reaction mixture has cooled down.

Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropiofenone with piperidine hydrochloride and 1, 2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution with MeOCMe3 when at room temperature and recrystn.

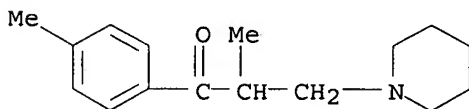
from 2-butanone containing Me2CHOH.

IT 728-88-1DP, Tolperisone, salts 3644-61-9P, Tolperisone hydrochloride

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(method for producing salts of tolperisone)

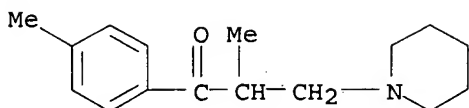
RN 728-88-1 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l13 ibib abs hitstr tot

L13 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:493695 HCAPLUS

DOCUMENT NUMBER: 141:54355

TITLE: Method for producing salts of tolperisone

INVENTOR(S): Czollner, Laszlo; Kaelz, Beate; Rothenburger, Jan; Welzig, Stefan

PATENT ASSIGNEE(S): Sanocemla Pharmazeutika A.-G., Austria

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

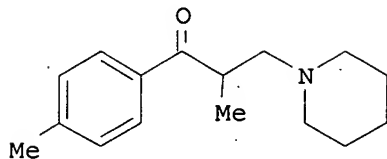
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004050648	A1	20040617	WO 2003-AT92	20030331
W: AE, AG, AL, AM, AN, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AT 2002001823	A	20050815	AT 2002-1823	20021205
AT 413539	B	20060315		
CA 2507691	A1	20040617	CA 2003-2507691	20030331
AU 2003227075	A1	20040623	AU 2003-227075	20030331
EP 1567510	A1	20050831	EP 2003-812092	20030331
EP 1567510	B1	20061220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 348821	T	20070115	AT 2003-812092	20030331
ES 2275140	T3	20070601	ES 2003-3812092	20030331
MX 2005PA05571	A	20051018	MX 2005-PA5571	20050525
NO 2005003176	A	20050905	NO 2005-3176	20050628
US 2006041141	A1	20060223	US 2005-537434	20050715
HK 1085199	A1	20070525	HK 2006-102666	20060228
PRIORITY APPLN. INFO.:			AT 2002-1823	A 20021205

EP 2003-812092
WO 2003-AT92A 20030331
W 20030331OTHER SOURCE(S): CASREACT 141:54355
GI

I

AB The invention relates to a method for producing an addition salt of 2,4'-dimethyl-3-piperidino-propiofenone [tolperisone (I)] with a pharmaceutically acceptable acid. According to the invention, 4-methylpropiophenone is reacted with piperidine hydrochloride and 1,2-dioxolane in the presence of an acid serving as a catalyst, and the tolperisone obtained in the form of an acid addition salt is separated by filtering after

the reaction mixture has cooled down. Thus, I·HCl is prepared via a modified Mannich reaction of 4-methylpropiophenone with piperidine hydrochloride and 1,2-dioxolane in aqueous HCl followed by dilution with EtOAc while warm and further dilution

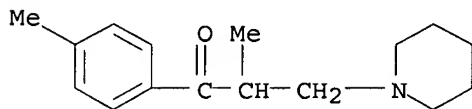
with MeOCMe₃ when at room temperature and recrystn. from 2-butanone containing Me₂CHOH.

IT 728-88-1DP, Tolperisone, salts 3644-61-9P, Tolperisone hydrochloride

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation) (method for producing salts of tolperisone)

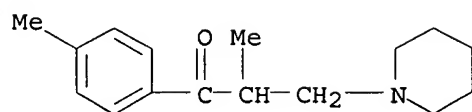
RN 728-88-1 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)- (CA INDEX NAME)



RN 3644-61-9 HCAPLUS

CN 1-Propanone, 2-methyl-1-(4-methylphenyl)-3-(1-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

110.11

351.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-10.14

-14.82

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